

Induction Logging System and Method Featuring Multi-Frequency Skin Effect Correction**Abstract of the Disclosure**

[0070] A system and method of correcting skin effect of conductivity measurements made by electromagnetic induction well logging instruments. A limited number of measurements using different frequencies may be used. The skin effect correction system and method is capable of processing a complex signal waveform but only requires the in-phase signal measurements which are then corrected for the skin effect value and the geometric factors of the apparent conductivity measurements, thus making the corrected measurements suitable for advanced processing with modern array-type induction logging tools.